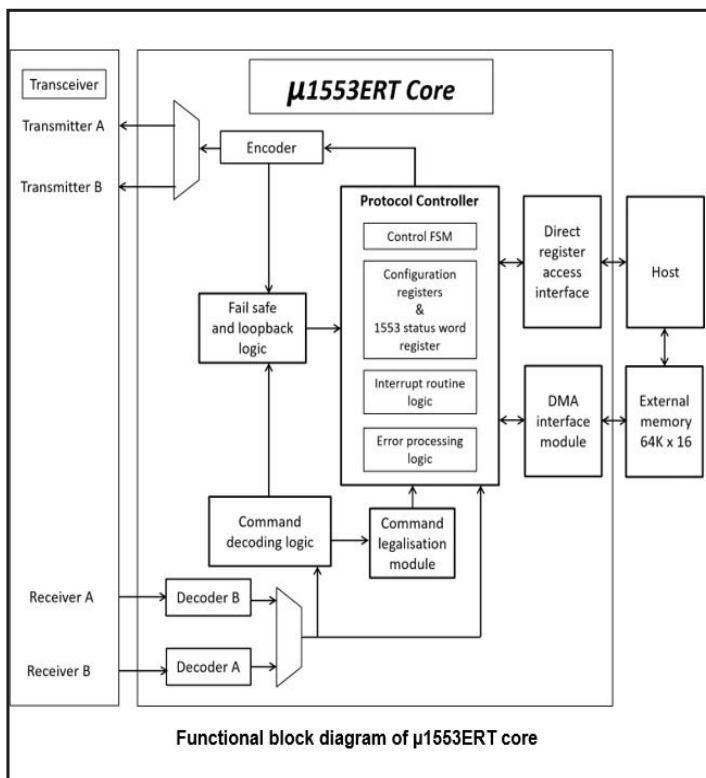


MIL-STD-1553B Enhanced Remote Terminal (μ 1553ERT) IP core

U R Rao Satellite Centre (URSC) of Indian Space Research Organisation (ISRO) has developed a MIL-STD-1553B Enhanced Remote Terminal (μ 1553ERT) IP core.

μ 1553ERT IP core is a technology and vendor independent soft core with enhanced features, which will be a replacement for Summit and ACTEL RT devices. The host/sub-system can interface with the core through control and status IOs as well as through the direct register access interface.



Salient Features

- ✦ Target technology and vendor independent core.
- ✦ Interfaces to standard 1553 transceivers.
- ✦ Selectable clock rate of 12, 16, 20 or 24 MHz.
- ✦ Supports up to 64Kx16 external memory .
- ✦ Programmable sub-address to memory mapping using descriptor pointer table.
- ✦ Support for programming configuration registers through direct register access interface.

- ✦ Support for external illegalization through configuration registers.
- ✦ Supports three addressing/buffering modes: indexing, buffer ping pong, circular buffer.
- ✦ Programmable interrupt architecture with automatic interrupt logging.
- ✦ 16 bit read/write time tag register with support for external clock input.
- ✦ Fail safe Finite State Machines: Core resets itself if it enters any faulty state.
- ✦ Fully synchronous operation with single clock domain.

Major Specifications

- ✦ Core compliant to specifications as per MIL-STD-1553B Notice II.
- ✦ Validation as per RT Validation Test Plan MIL-HDBK-1553, Appendix A.

Technology Transfer

URSC/ISRO offers to transfer this technology of MIL-STD-1553B Enhanced Remote Terminal (μ 1553ERT) IP core to industries in India with adequate experience and facilities. Industries interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities.

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